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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/560,787

12/14/2005

Toshiya Saito

126167

7407

25944 7590 09/28/2009

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EXAMINER

ESSEX, STEPHAN J

ART UNIT

PAPER NUMBER

1795

MAIL DATE

DELIVERY MODE

09/28/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/560,787	<b>Applicant(s)</b> SAITO ET AL.	
	<b>Examiner</b> STEPHAN ESSEX	<b>Art Unit</b> 1795	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 24 July 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1, 3-5, 8 and 9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3-5, 8 and 9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/14/2009, 7/24/2009</u> .                                    | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. The applicant's amendment filed on July 24, 2009 was received. Claim 1 was amended. Claims 2, 6 and 7 were cancelled.

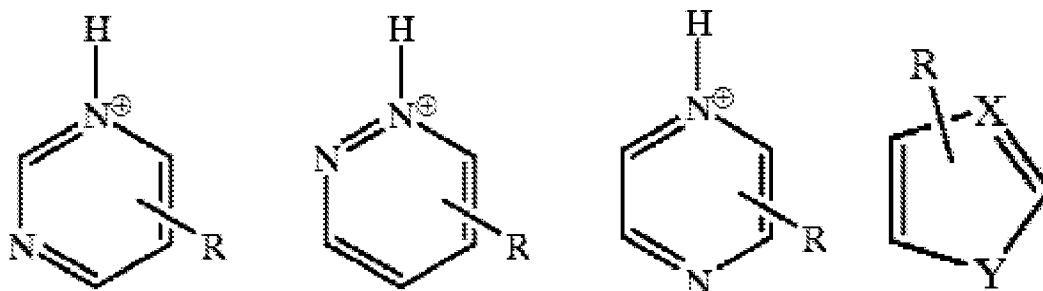
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### ***Claim Rejections - 35 USC § 102***

3. In view of Applicant's amendment of claim 1, the Examiner withdraws the previously set forth rejection of claims 1, 3-5, 8 and 9 under 35 U.S.C. 102(e) as anticipated by Komiya as detailed in the Office Action dated February 12, 2009.

4. Claims 1, 3-5, 8 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Kreur et al. (hereinafter "Kreur") (U.S. Pat. No. 6,264,857).

Regarding claims 1, 5, 8 and 9, Kreur teaches a proton conductor comprising an acid and a nonaqueous amphoteric material (see col. 2, lines 5-14). The acid acts as a Brønsted proton donor and is particularly preferred to be p-toluenesulfonic acid, methylsulfonic acid, or trifluoromethylsulfonic acid (see col. 2, lines (53-67). The nonaqueous amphoteric material may be one of the following structures (pyrimidine, pyridazine, pyrazine and imidazole):



where X = NH; Y = N; and R = H, CH, C<sub>2</sub>H<sub>5</sub> or CO<sub>2</sub>R', with R' = H or CH<sub>3</sub> (groups with a total number of constitutional atoms other than H of 3 or less; hydrocarbon group with 3 or less carbon atoms; carbonyl group; carboxyl group; nitro group). Particular preference is given to low molecular weight compounds which contain imidazole or pyrazole as amphoteric groups (see col. 4, lines 1-24).

Regarding claims 3 and 4, Kreur teaches that the low molecular weight amphoteric materials preferably have a molecular weight of  $\leq 500$ g/mol (see col. 3, lines 54-56).

### ***Claim Rejections - 35 USC § 103***

5. In view of Applicant's amendment of claim 1, the Examiner withdraws the previously set forth rejection of claims 2, 6 and 7 under 35 U.S.C. 103(a) as obvious over Komiya as detailed in the Office Action dated February 12, 2009.

### ***Response to Arguments***

6. Applicant's arguments with respect to claims 1-9 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to STEPHAN ESSEX whose telephone number is (571) 270-7866. The examiner can normally be reached on Monday - Friday, 7:30-5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dah-Wei Yuan can be reached on (571) 272-1295. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1795

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SJE

/Dah-Wei D. Yuan/  
Supervisory Patent Examiner, Art Unit 1795